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ABSTRACT

Competency Based Teacher Education (CBTE) proposes changes in the traditional teacher education system, which include establishing behavioral objectives for student teachers and modifying basic teaching tools that all students must learn to master. CBTE also proposes that teachers colleges be conducted without failure. Critics of CBTE question the effectiveness of behavioral objectives as opposed to the traditional goals of teacher education. They point out that research has not yet identified those explicit, overt teaching behaviors CBTE claims necessary. Another concern of critics of CBTE is the apparent lack of consistency among individual advocates and disagreements over principles. Despite the widespread acceptance of the theories of CBTE, there are still those who maintain that solving the problems of teacher education is not through the learning of behavioral objectives. Their advice for reform of teacher education rests on an avoidance of the spurious claims of CBTE and a categorical denial of its questionable assumptions. Teacher education can be reformed only if entrance requirements to teacher education are stiffened- not abolished, if basic theory courses are infused with academic substance, and if methods courses remain in the curriculum. The establishment of these kinds of standards may move teacher education out of its academic morass. (DMT)

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CAN BEHAVIORISM SAVE TEACHER EDUCATION?

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To say today that teacher education is a troubled venture is to belabor the obvious. The practice of requiring teachers-to-be to take specialized college courses in pedagogy, now well into its second century, has never faced more varied assaults. The recent pressure from state legislatures that teacher educators suddenly be "accountable" for their actions is only one part of this deepening crisis. The accusations from other university departments that teacher education is an intellectually sterile, or at least a highly simplified version of university study, continue to be made. Some such critics contend teacher education remains a haven for the academically mediocre or slothful student. They point to the present easy entry to teacher education. The high grade point averages of its graduates are contrasted with the content of education textbooks--content designed, it is said, for instant and effortless understanding rather than the usual intellectual challenges. Despite this, it is common to hear students deride their supposedly easygoing teacher education courses.

Worse yet, present day teachers are trained to the point of "mindlessness," a Carnegie study concludes. That is, teachers are taught in education courses to have little awareness of the purposes behind what they teach. They thus are responsible to a great extent for the "Crisis in the Classroom."[1] Even educationists are heard to despair at the inability to point to tangible results of their programs. They doubtless suffer numerous other anxiety-provoking existential concerns.

Knowing of these matters, some commentators give support to the idea it would be better if students avoided teacher education altogether, as it now is conducted. Students would be better served, it is vouched, if allowed "to go straight into a classroom and work under a good supervisor."[2] It is understandable that educationists shrink from this idea of teacher training as an apprenticeship or technician system as this would demolish the claims they make for professionalism. Nonetheless, one recent conference of public school administrators echoed the notion. Its blunt decision: "The university can't train teachers."[3]

It is not surprising, then, that beleaguered teacher educators currently search in rather desperate ways for the pathway out of their unenviable predicament. The very existence of teacher education as a vocation is threatened, some of them warn, if the personalized, non-didactic, heuristic, or humanistic ways of the past used to conduct teacher education are not abandoned. Since these ways have fared so badly, it is said, it now is time to turn away from the "outmoded" philosophies they depict.

Not all is pessimism among teacher educators, however. The advocates of behaviorist psychology among this group respond to the omens of disaster with relish. These are the educationists whose beliefs in behaviorism have had relatively little influence on teacher education during and up to the demise of the Progressive Education movement. Flitting through the works of B.F. Skinner,

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and especially those of his more ardent disciples on behavior manipulation, they have espied the workings of a plan they are convinced will save the obviously besieged wagon train of teacher education. They refer with pride to the successes of recent management practices based on this behaviorism, in industry, business, the military and medicine. "The production of competent teachers," they agree, "can be approached as a management problem, using many of the techniques developed for industrial management."[4]

So as not to be confused with any tactic to draw the beleaguered wagons of teacher education into a circle, these behaviorists choose a title for their plan which makes clear their departure from the past defenses of teacher education, and one that points out their devotion to modern technology's view of excellence. To honor the standards of technology, they call their scheme performance-based, or competency-based teacher education (PBTE, CBTE). For reasons to be shown, this new proposal for the modification or manipulation of student teacher behavior is perhaps the most talked of event among educationists since the turn of the century (the point at which pedagogists devised the needed tactics to break through previous barriers of resistance and get teachers' colleges onto university campuses).

As with headstrong movements of the past, the growing number of essays in defense of PBTE indicate its crusading nature, and the vigor and eagerness of its advocates. So far, with no noticeable modesty, PBTE cites itself as the only proper replacement for traditional teacher education. PBTE must rule, it argues, because past teacher training programs have failed to account, especially to the public, in reliable ways for what they say they do. Moreover, PBTE contends, it is impossible to inject public accountability into these older programs since they are so obscure, and waste so much of their time teaching generalities and theories. To PBTE, traditional teacher education is guilty of much more than bad teaching, however. It is a "semilogical, intuitive, experiential, folklorish system" that keeps "the educational processes we practice clothed in ambiguity and mysticism."[5] So, only when the list of changes called for by PBTE are instituted will the exacting assessment needed in teacher education come about, it is proclaimed. These changes are hardly insignificant. Nor are they just a matter of degree.

To head its list of changes, PBTE says there are at present a number of explicit, overt or physical behaviors, basic tools for teaching, all students must learn to master. These are not now taught, or are badly taught by traditional programs. Specifically what these behaviors are, the leaders of PBTE refuse to say. Charges of violations of academic freedom could be made if all education professors had to teach the same thing. Consequently, PBTE promises each peculiar teacher educator or training program may set up his or its personal list of these basic behavioral skills. By virtue of its insistence that it does not require a given professor or program to accept any number or type of these behaviors, CBTE maintains it represents a highly individualized and personalized instruction. How to control runaway or eccentric versions of PBTE from individual professors is not revealed, however. For instance, one teacher educator of the CBTE ilk states a teacher "is going to be authoritarian and rigid" unless he follows a "prescriptive teaching system" learned, as for example, when "an anesthesiology student works on a plastic body hooked up to a computer."[6]

These assumed explicit and overt behaviors, however they are devised or selected, then must be written up in behavioral terms. They must be stated as behavioral objectives (BOs). (The importance of BOs was first recognized by behaviorists in their attempts to "program" learning materials, that is, make

them "teacher proof.") The student teacher, under any given PBTE professor or program, gets his recommendation for a teaching credential only after he has achieved mastery of an indeterminate number or type of these BOs. The successful teaching act becomes the sum of these discrete BOs.

PBTE is convinced further that teacher education should be conducted as teachers' colleges without failure. Taking a lead from Glasser's book on success-only schools,[7] PBTE announces that whatever the remaining entrance requirements to teacher education, they are to be dismissed as irrelevant. Now, time, rather than students' aptitudes, interests, prior knowledge, grade point average, or level of intelligence, becomes the critical factor in the mastery of BOs. If a student's performance does not indicate he has achieved the mastery of any given BO, he is assigned this task again, and again, etc., until he finally masters it.

This allows, too, for a radical change from the use of the customary academic marks, A through F. In PBTE, the judgment of "pass" or "mastery" becomes the mark used to indicate students' achievement of BOs. "Fail" or "no credit" are unnecessary, of course. All students will come up to the "pass" or "mastery" level since they will be given whatever extra time they need to do this. Helping with this is PBTE's prohibition that BOs be large, long, irresolute, sentimental, provocative, tacit, abstract, complex, heuristic, or theoretical (or difficult?).

For its conception of teachers' colleges without failure, PBTE also leans heavily on the beliefs of Bloom, who has testified that if given enough time, 95 percent of all college students can attain the mastery (the usual mark of A) of any subject matter. Thus, for students in PBTE, the "relation between aptitude and achievement would approach zero."[8]

The professors in PBTE who grant this new "pass" mark will find themselves to be uniform in its application as never before in traditional programs, so goes PBTE's assurance. This is insisted upon, in spite of the fact PBTE professors will have complete personal discretion as to how difficult BOs will be, how many of what type will be assigned in a course, what the quality of performance for BOs they will demand, and how the performance with them will be assessed. (Or will they have all these freedoms? PBTE's initial assurance to the individual education professor that his academic freedom will be respected is badly undercut by its descriptions of the overseers of BO writing. These are the "select group of competent individuals" who "may be chosen to rewrite these initial contributions" - the BOs written by individual professors.[4])

One may ask, further, what of the behaviors traditionally desired from student teachers that obviously cannot be stated precisely and explicitly, those which are not overt or measurable? PBTE will not be undone by this unkind blow at the central logic of its scheme. It merely shifts ground away from its previously inviolate argument that teacher education goals are always precise, overt and measurable, to designate as valid an additional type of BO. This other type is called an "affective, exploratory, experience, or expressive" objective. Such second-rate objectives, of an unstated proportion or relative importance to the kind that satisfy the basic tenets of PBTE, are admitted to "resist precise definition and thereby preclude the precise assessment sought by competency-based approaches."[9] How they are BOs, since with them no attempt is made to specify the learning or behavioral changes that will result, is not explained. The partial solutions to this, alluded to but not described so far by PBTE, remain a mystery.

Despite reminders to PBTE of these and other lapses in its logic, the assurances that it holds the only reasonable program for renovating and regenerating teacher education are the voicings of a confident, if not self-righteous movement. Flaunting a newly-found popularity with state legislatures and the U.S. Office of Education, it boasts of having "an inherent potential for achieving whatever objectives it sets for itself."[10] It accuses those educationists not yet within the fold of being afraid of accountability, or as spiteful enemies of educational progress. Educationists "have a professional and moral obligation" to join up with PBTE, it is asserted.[11]

The negative criticisms so far about PBTE, although few, make it apparent, nonetheless, that not all teacher educators are intimidated by such charges and specifications. In contrast to the recent "band wagon" effect of PBTE which its advocates point to with considerable pride, some educationists remain more impressed with the "card stacking" or self-glorification in which the movement indulges. Assuming that all teaching doctrines leak, they say, then to what extent does PBTE hold water? On close inspection, the answer to this seems to be that the cracks in PBTE are as startling to view as are its maneuvers to gain eminence in its field.

In the first place, a critical question about PBTE is whether BOs are somehow better than the traditional goals of teacher education. To reply to this, one must keep in mind the evidence, so far, which indicates that the degree to which BOs specify certain behavior is not a reliable determiner of student learning.[12] Then, with the use of BOs, the distinction between knowledge and behavior is usually ignored. That is, any demonstration of a certain behavior gives limited information as to what a person truly knows. Behavior is bit data from which one must continue to infer what a person probably knows. Behavior also can be an indirect or false expression of knowledge. Conversely, knowledge is expressed in a wide and large variety of behaviors. There is no acceptable way at present, then, to link knowledge with any particular behavior. As well, there are times one can have knowledge but not be able to physically demonstrate it. It is not always possible to translate one's knowledge into a set of overt behaviors, especially upon demand. A good example of this is when a child knows some aspect of language (which can be confirmed), and yet he cannot overtly produce (behave with) this knowledge. It is simply not so, as PBTE claims, "that the only evidence available to show that an individual has learned something is his ability to perform or do something that overtly demonstrates the learning."[4] PBTE ignores the distinction between competence and performance.

There are other serious faults of BOs. In PBTE, BOs are not based on a theory that would govern the size of BOs, tell which specific BO is the most appropriate reflection of a certain knowledge, or what the expected standards of behavior in this instance should be. To say a "good" BO is one written so it communicates these three elements to the student merely begs the question of how this can ever be done. Accordingly, it appears BOs are written, by and large, on the basis of a peculiar writer's intuitions, interests, experiences, or value judgments. Yet at the same time reliable and objective evaluations are expected of students' performance on BOs. Accordingly, there often are BOs, offensive to many educationists, chosen to match goals of teacher education, e.g., 75 (not 74) per cent on a test can supposedly be the sign a student teacher has mastered proper attitudes toward children. It is not difficult to document that the very kinds of teaching performance one would have expected BOs to clarify (according to PBTE) are the ones with which they flounder around.

And most importantly, BOs in PBTE violate the iron law of forgetting as established by Ebbinghaus[13] over sixty years ago. Incredibly enough, PBTE

would have us believe that a student's one-time demonstration of his ability to learn some BO up to a "minimal standard of performance"[4] (a seeming necessary standard for teacher's colleges without failure) means he henceforward will have retention of the BO. That is, unlike what happens in all other kinds of one-shot learnings, where the control of what is learned is minimal, the PBTE student teacher will be able to recall his barely-learned BOs and transfer them into the proper teaching situations of the future without hesitation or error. He will maintain these once-performed BOs under any classroom condition, including stress, fatigue or confusion. This demonstrates, if little else, PBTE's belief in the practical yet occult powers of BOs.

The research on the use of BOs in "mastery learning" (where the student is given as much time as he wishes to learn something) deals, so far, with how the use of BOs affects the learning of static information, such as mathematics facts or foreign language vocabulary.[14] It is disquieting to learn PBTE refers to evidence of this sort for its proof that BOs will more positively affect learning in teacher education than heretofore was possible. Actually, there seems no evidence at present that BOs can be so applied to teaching that requires creative thought or critical thinking. Not to be undone by this lack of evidence, PBTE predicts that sometime in the future it will "emphasize more divergent, creative and personal experiences" for teachers - while insisting all the while, one must add, that all student teachers' performances must be "specified and agreed to in rigorous detail in advance of instruction."[15] Obvious contradictions as this, that seem beyond the concern of the apologists of PBTE, frequently bob to the surface of this movement.

PBTE talks of both knowledge and behavior skills as important content of its BOs. But, as Broudy[16] asks, why is knowledge or theory necessary in PBTE if performance is the essential matter? How is the effect of knowledge or theory on performance to be measured by PBTE? Not by a paper and pencil or spoken recitation, surely, or by a written or oral defense of any given choice of performance. The former is condemned by PBTE as not predictive of good teaching behavior (hence its attack on traditional teacher education in this respect). The latter is unnecessary since performance, not a logical justification of performance, is what PBTE calls for. One must conclude from this, although PBTE says otherwise, that knowledge and theory are of little importance to its operation. At least, the everyday practitioner will not have to understand the built-in theory of what he performs. Lurking in the PBTE domain, then, is the notion of a Brahmin class of educationists and teachers who will direct the didactical machines their colleagues are turned into.

In the second place, research has not yet identified those explicit, overt behaviors PBTE claims are necessary for all teachers to perform if children are to learn. It is not known at this point which teaching acts are inevitably associated with pupil performance, what aspects of teacher education correlate highly with later success in teaching, what kind of teacher-pupil relationships are closely related to pupil achievement, or how instruction can be best fitted to the way a pupil learns.[17] As a recent review of such research attests, "research has produced few useful answers to these questions: . . . What are the behavioral skills a teacher must possess in order to be successful?" and "What are the training experiences that will help him acquire the skills most efficiently?"[18] PBTE persists in the notion "we do have reasonably good indicators of the knowledge requisite to effective teaching."[19] "Read the research," can be the best reply to this.

Or, failing this, read the reviews of such research, as for example, Heath and Nielson's careful analyses[20] of forty-two studies made in the attempt to identify the teacher skills that conceivably might be related to pupil achievement. Because of the thoroughgoing nature of this review, coupled with the fact its findings agree without exception with other reviews of the research on this matter (Heath and Nielson quote nine such reviews), it seems worthwhile to quote the conclusions of Heath and Nielson in toto:

> First, the research literature on the relation between teacher performance and student achievement does not offer an empirical basis for the prescription of teacher-training objectives.
>
> Second, this literature fails to provide such a basis, not because of minor flaws in the statistical analyses, but because of sterile operational definitions of both teaching and achievement, and because of fundamentally weak research designs.
>
> Last, given the well-documented strong association between student achievement and variables such as socio-economic status and race, the effects of techniques of teaching on achievement (as these variables are conventionally defined) are likely to be inherently trivial.

Logically, as well, it seems silly to assume PBTE has the special providence to successfully pluck out of this welter of conflicting opinion a prescribed set of overt actions all successful teachers must perform. If PBTE would only follow its own advice on this -- ("To the degree that common elements can be identified in the behavior of all effective teachers, then to that degree it is appropriate to require the trainee to meet certain specified objectives."[4]) -- the matter would be settled. Following its own conditions, PBTE would be required to forego its beliefs that student teachers' behaviors can and must be "specified and agreed to in rigorous detail in advance of instruction."[15]

A third concern of the negative critics of PBTE is the apparent lack of consistency among the thoughts of its individual advocates, plus the disagreements over principles among various parties who espouse the scheme. The present discussion has shown PBTE is inconsistent by, first, establishing rigorous standards for BOs, and then quietly moving away from these when it is expedient -- to call for "affective" objectives. Since the criteria for the selection of regular BOs cannot be established by PBTE, what hope are we given that they can be determined for the even more elusive "affective" BO? (An embarrassing question for PBTE: "How many "affective" BOs equal a regular one?") Then, the notion that PBTE knows of the existence of the explicit teaching skills all successful teachers must use, although no one in PBTE will name them, sounds suspect. Moreover, does its defense, and subsequent desertion of an individual professor's academic freedom make PBTE sound trustworthy? PBTE's error in thinking BOs can be discharged with no attention to the theory behind them also leaves us with little to refute the charge that it, too, will lead to "mindlessness" in teaching.

Furthermore, advocates of performance-based education argue amongst themselves over principles. For example, to one's surprise, the clear relationship between certain behaviors (BOs) to be established in student teachers and the

desired changes in their pupils' behaviors is not seen as defensible by some proponents of performance-based education. Popham,[21] for example, criticizes teacher educators who have proposed the idea that more desirable pupil behaviors than otherwise would be possible, will result when particular sets of instructional procedures are used by teachers. He contends "the reasons that their attempts [at establishing this relationship] have been, for the most part, in vain," is that such efforts have attempted "to judge if the instructional procedures employed by the teachers were 'good.'" Popham reminds us, correctly enough, that the research on this matter does not allow for the use of such a generalization. Accordingly, Popham says, "our assessment of teaching competence should be based on the instructor's ability to achieve desired ends; and should not relate at all to his use of particular means." Sullivan, another behaviorist, agrees.[22] "One common error in the evaluation of school programs results from the tendency of many educators to treat the content of the program as the most important criterion for evaluation," Sullivan says. (Content here "is simply the materials and methods employed by the teacher.")

This conflict about a basic aim of performance-based instruction surely is perplexing to anyone not as yet sure of the rationale of PBTE. One must ask: Do the advocates of PBTE seriously mean to say they intend, first, to train student teachers to perform rigorously-specified classroom behaviors, and then put them in alongside freewheeling credentialed teachers who have been encouraged by other behaviorists to take all kinds of liberties in instructional matters (as long as their pupils are learning)? This disagreement among behaviorists is an important one to uncover since one cannot concede, logically at least, that these two conditions could prevail simultaneously.

PBTE can be charged, fourth, with inconsistencies of a practical nature. For example, is it propitious during the time of a large nationwide teacher oversupply to discontinue entrance requirements to teacher education? What would be the substitute system in this case? First come, first served? A la mode: whites, then blacks? Or vice versa? Or can standards for entrance to teacher education be lightly abandoned, considering that such are often legally mandated by state laws? Then, considering today's tight budgets for teacher education, what is the source of the money to continue students in PBTE who do not achieve their BOs the first (or second, or third) time around? Or, is this to be expediently circumvented by a further lowering of standards to the degree that no PBTE student fails to "pass" the first time he tries?

In sum, one would have thought the readily available criticisms of PBTE, as presented here, would signal that this new scheme is not yet ready to displace the traditional approaches. It seems reasonable to suggest that before this happens, PBTE straighten out its logical tangles, do something to demonstrate the worthiness of its many radical assumptions, give us something more than "promises expressed in performance words,"[23] and even enlist support of its scheme from the university faculty as a whole (who are also responsible for teacher education, after all). In short, before it claims the right to revolutionize teacher education, PBTE needs to put its own house in order.

It is unlikely the formal installation of PBTE programs will follow any such careful plan of operation, however. For example, in California a recent teacher education governance law requires that teacher education institutions there be "accountable" (the charge in this act is they have not been) at the risk of the loss of their accreditations. The new law did not result from an initiative campaign among California teacher educators. Instead, one gathers its origin was the result of special pleadings to the California legislature by

behaviorists in the U.S. Office of Education, in its centers for the study of the enforcement of evaluation, and in the American Association of Colleges for Teacher Education. Aided by behaviorists at the colleges affected, this law is interpreted by California state department of education functionaries to mean that the best way teacher educators can be made accountable to the public is to put them under the control of PBTE. If authoritative education department chairmen who also espouse PBTE are involved, the program can easily be rammed through. Opponents to the PBTE plan find themselves sidetracked and ignored, or relegated as obstructionists.

Educationists are learning, therefore, that behaviorism represents a dedicated and a relentless movement whose size does not indicate the extent of its influence. The doctrines of behaviorism have found favor at the various seats of local, state and national power and control over higher education - understandably, since ideas for new ways to bring professors into account always has held an irresistible attraction for these forces.

As well as the PBTE steamroller is seeming to work, there still are those who maintain that the way out of the present mess of teacher education is not through the learning of BOs as interpreted by PBTE. Their advice as to the reformation of teacher education, which is rapidly becoming lost in the tumult of PBTE, rests on an avoidance of the spurious claims of PBTE and a categorical denial of its questionable assumptions. In other words, such a non-PBTE plan would say that teacher education can be reformed, but only if:

One, the entrance requirements to teacher education are stiffened, not abolished. This could be done by requiring higher GPA's from students, or better yet, their successful passage of tests of general information. Along with this, apperception tests could be designed to weed out would-be teachers with extreme personal problems, or to accept those with special talents or experiences.

Two, the courses in educational philosophy, sociology and psychology are infused with academic substance. The slight relationship now found between knowledge of these fields and teaching[24] can be explained as the result of the small amounts of these subjects students are actually required to learn. It would be refreshing to find these particular education courses to have gained the reputation as among the most rigorous on campus.

Three, there is an end to "methods" courses as they are now offered. These courses in elementary education, for example, aimed at giving students advice on how to teach, enroll student teachers from all grade levels who are teaching virtually all subjects to children from all the income groups. These student teachers are lumped together into barren college halls that bear no resemblance to the scenes of their teaching, which are miles away. Instead of this arrangement, whose very nature signals its probable failure, the methods professor would provide his advice on teaching at the schools in which student teachers are assigned. After observing their attempts at teaching, he would give student teachers personalized reading assignments, conduct tutoring sessions, or meet with groups of students he sees are facing common problems. This professor could reject the PBTE view that his task is to teach all his students to perform standard or predetermined teaching acts (BOs), after which the students uniformly perform these with a group of pupils, regardless of its nature or character. Instead, the methods professor would suppose that the variety of pupils in classes, the differences among credentialed supervising teachers involved, and the range of schools with diverse income groups would make such standardization impossible, in any event.

It is obvious this three-pronged reform of teacher education takes the view that some candidates for teacher education cannot be admitted to this program. It contends that unless a student has a substantial knowledge of the philosophy, sociology and psychology of education he should not be allowed to attempt student teaching. Lastly, it notes that personal, on-the-spot attention to student teachers' needs for information on teaching methods, and ways to apply the theory they know, will do more to improve this practice than will a learning of the BOs of PBTE. It assumes, therefore, that teacher education is not a fool-proof system for student success. Quite to the contrary, it would set up the means to exclude students who do not meet high standards at the entrance level, the theory and knowledge level, and the practice teaching level. The growing oversupply of teachers makes such a reform possible, as was never the case in the days of teacher shortages.

The criterion for "accountability" in this reform, obviously is not the hopelessly egalitarian view professed by PBTE. That is, that 95 per cent of all students in the university can somehow be brought to learn some promiscuous set of BOs, and thus be approved of as qualified teachers.

To the contrary, a meritocratic reform of teacher education, as the above, would account for the quality of its program in other ways. This would be with evidence that a significant per cent of students in general do not meet its entrance requirements. (This would be coupled with a provision for discovering the compensating factors - talent and/or experiences - that would admit some otherwise unqualified students.) It would document that after students are admitted to its program they are required to learn substantial amounts of educational philosophy, sociology and psychology. The quality of its student teaching program would be shown through the ways student teachers apply their well-established knowledge of these subjects to the practice of teaching children. This would replace the avoidance, ignorance or disparagement of educational theory and knowledge, which can be the case today, and surely would be perpetuated by PBTE.

The establishment of these kinds of standards may move teacher education out of the academic morass into which it has drifted over the years. At least they signal a route out of the intellectual quagmire into which PBTE is likely to drive teacher education even deeper.

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